

For Wednesday

- Read 10.5
- Homework:
 - Weiss, chapter 10, exercise 28

Note that you must show the **PROCESS** – this is about the process by which you reach the answer, not just the answer itself.
- Program 5 due

Program 5

- Any questions?

Research Paper

- Need topics approved . . .
- Rough draft of COMPLETE paper due Friday
- Any questions?

Dynamic Programming

Matrix Multiplication

Optimal Binary Tree

Random Numbers

- Are they really random?
- What makes a good sequence of numbers for the purposes of randomized algorithms?

Linear Congruential Generators

- Basic concept:
 - $x_{i+1} = Ax_i \bmod M$
- First x must be given: cannot be 0.
- Quality of the generator depends on the selection of A and M.
- If M is prime, x_i is never 0.
- Need to handle arithmetic overflow.
- PS: Standard rand() is not this good.

Skip Lists